

ENHANCING VIETNAM'S MARITIME SECURITY AND THE ROLE OF UNMANNED MARITIME SYSTEMS

BY PRAKASH PANNEERSELVAM AND VAN T. PHAM

Prakash Panneerselvam, PhD, (prakash.p@nias.res.in) is Japan Foundation Indo-Pacific Partnership (JFIPP) Research Fellows & Assistant Professor, National Institute of Advanced Studies (NIAS), Bengaluru.

Van T. Pham, Dr. rer. nat, (<u>phamtvan2014@gmail.com</u>) is founding director of the South China Sea Chronicle Initiative in Vietnam.

Vietnam's maritime security is shaped by its geographic position, strategic interests, and the pressing need to safeguard its territorial waters. The South China Sea (known as the East Sea in Vietnam) serves as a crucial route for international trade. It is also marked by intricate territorial disputes, highlighting the importance of Vietnam's naval and coast guard forces. China's growing fleet of unmanned air, surface, and underwater systems pose a serious security threat to Hanoi. In August 2024, a Chinese WZ-10 drone entered Vietnam's airspace 160 to 170 kilometers from Cam Ranh, a vital naval base. The Chinese have raised the temperature in the South China Sea by using unmanned underwater vehicles (UUVs), gliders, and Argo floats, which are dual-use.

This has prompted Vietnam to seek measures to enhance its monitoring, patrolling, and response capabilities without overcommitting its limited conventional forces. A key opportunity to bolster these efforts is integrating unmanned systems into Vietnam's defense arsenal. Given the existing capacity shortfalls, Quadrilateral Security Dialogue ("Quad") nations, which have a plan to support capacity-building for regional navies in Southeast

Asia, are well-positioned to enhance Vietnam's capabilities in this area.

The Vietnamese People's Army (VPA) has extensive experience operating UAVs to augment its maritime intelligence, surveillance, and reconnaissance (ISR) capabilities. These UAVs are either domestically developed with foreign assistance or imported from abroad. Vietnam also showcased its larger class of UAVs, conceivably a medium-altitude longendurance system, during its first international defense expo in 2022. However, Vietnam's focus on unmanned maritime vehicles, both surface and underwater, is still in a nascent stage. As tensions in the maritime domain with China escalate, the VPA seeks advanced unmanned surface vehicles (USVs) and UUVs to bolster its maritime security and protect critical maritime infrastructure in the Vietnamese EEZs. These systems are not only cost-effective but also play a crucial role in ISR capabilities.

The Quad is now more strategically aligned and is recogniz ed as a valuable platform for fostering regional cooperation that aims to enhance peace and stability in the Indo-Pacific. The September 2024 Quad joint statement explicitly highlights the importance of strengthening maritime security capabilities of Southeast Asian nations. Vietnam, given its robust ties with the Quad countries, has much to gain from partnering with the Quad, particularly in improving its technological and operational prowess in maritime security.

The Quad nations have expertise in developing and operating unmanned maritime systems. Sharing technological knowledge co-developing or specialized systems tailored to Vietnam's requirements would substantially help its ISR capabilities. Particularly, India and Vietnam maintain close defense ties, given that both use Soviet weapon systems. During Vietnamese Prime Minister Pham Minh Chinh's state visit to India in August 2024, both nations reiterated their commitment to strengthening mutual relations. India has provided a \$300 million loan to Hanoi for acquiring two types of patrol boats. In addition, the US has supplied the Vietnam Coast Guard with 18 "Metal Shark" patrol boats, while Japan is offering a \$348 million loan to Hanoi for constructing six patrol boats, set to be operational by 2025.

There is potential for industrial collaboration, which could lead to a joint venture in constructing UUVs or USVs that would be advantageous for both nations. Defense industry cooperation to develop unmanned maritime systems presents a significant opportunity for the Quad nations to collaborate with Hanoi. This can include building or upgrading command-and-control infrastructure to ensure seamless operation and coordination. Additionally, supporting Vietnam in building a domestic unmanned maritime systems industry, potentially through technology transfers and specialized human resource training, could foster greater autonomy and capability in Vietnam's defense sector.

While the potential benefits of unmanned systems are clear, they are not without challenges. Vietnam's approach to security partnerships is carefully balanced to avoid over-reliance on any one partner. Vietnam aims to engage with the Quad, ensuring its nonalignment policy remains intact while maximizing cooperation benefits. Although unmanned systems are more cost-effective than manned alternatives, acquiring and maintaining these still entails significant investment. Vietnam may need to explore financing options with the assistance of Quad nations. Additional challenges include the absence of a comprehensive legal and regulatory framework for unmanned systems development and deployment in Vietnam. The collaboration in unmanned maritime systems may represent a significant advancement for Vietnam and the Quad.

In conclusion, Vietnam's maritime security is a linchpin for regional stability and economic prosperity. As maritime threats grow more sophisticated, integrating unmanned maritime systems into its strategy will provide a critical edge for VPA. With its collective technological expertise and strategic interest in a free and open Indo-Pacific, the Quad can play a pivotal role. By focusing on technology transfer, training, infrastructure support, and joint exercises, the Quad can help build Vietnam's capacity to protect its waters. While Vietnam maintains a non-aligned stance, its advocacy

for a rule-based order and its reliance on international law to safeguard its maritime interests makes it a natural partner for the Quad. Strengthening Vietnam's maritime capabilities will therefore greatly enhance regional security and also underscore the Quad's commitment to safeguarding the shared interests of Southeast Asian countries.

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